

## References

- Amoroso, F. and W. W. Jones [1988], "Modeling Direct Sequence Pseudonoise (DSPN) Signaling with Directional Antennas in the Dense Scatterer Mobile Environment," *38th IEEE Vehicular Technology Conference*, Philadelphia, PA, pp 419-426, 15-17 June.
- Barts, R. M. and W. L. Stutzman [1991], "Modeling and Simulation of Mobile Satellite Propagation," *IEEE Trans. Antennas Propagat.*, (in press).
- Barts, R. M., W. L. Stutzman, W. T. Smith, R. S. Schmier, and C. W. Bostian [1987], "Land Mobile Satellite Propagation Modeling," *Proc of the 1987 IEEE A&P Society International Symposium*, Vol. 1, pp 20-23.
- Bell, T.E. [1988], "Technology 88 - Communications," *IEEE Spectrum*, pp 41-43, Jan.
- Bundrock, A. and R. Harvey [1988], "Propagation Measurements for an Australian Land Mobile-Satellite System," *Proc. of Mobile Satellite Conference*, pp 119-124.
- Butterworth, J. S. [1984a], "Propagation Measurements for Land-Mobile Satellite Systems at 1542 MHz," *Commun. Res. Cent.*, Ottawa, Canada Tech. Note 723, Aug.
- Butterworth J. S. [1984b], "Propagation Measurements for Land-Mobile Satellite Services in the 800 MHz Band," *Commun. Res. Cent.*, Ottawa, Canada Tech. Note 724, Aug.
- Butterworth, J. S. and E. E. Matt [1983] "The Characterization of Propagation Effects for Land Mobile Satellite Services," *IEE 3rd International Conference on Satellite Systems*

- for Mobile Communications and Navigation; Conference Publication No. 222, London, U.K., June 7-9, pp 51-54.
- CCIR [1986a], *Recommendations and Reports of the CCIR*, Volume V, Propagation in Non-Ionized Media, International Telecommunications Union, Geneva, Switzerland.
- CCIR [1986b], *Recommendations and Reports of the CCIR*, Volume VI, Propagation in Ionized Media, International Telecommunications Union, Geneva, Switzerland.
- Clarke, R. H. [1968], "A Statistical Theory of Mobile-Radio Reception," *Bell System Technical Journal*, Vol. 47, No. 6, July-August, pp 957-1000.
- Cygan, D., M. Dippold and J. Finkenzeller [1988], "Kanalmodelle fuer die Satellitengestuetzte Kommunikation Landmobiler Teilnehmer," *Archiv fuer Elektronik und Uebertragungstechnik*, Vol. 42, No. 6, pp 329-339.
- Davies, K. [1990], *Ionospheric Radio*, IEE/Peter Peregrinus Ltd, London, U.K.
- Flock, W. L. [1987], "Propagation Effects on Satellite Systems at Frequencies Below 10 GHz; A Handbook for Satellite System Design (Second Edition)," *NASA Reference Publication 1108 (02)*, December.
- Goldhirsh, J. and W. J. Vogel [1987], "Roadside Tree Attenuation Measurements at UHF for Land-Mobile Satellite Systems," *IEEE Trans. Antennas Propagat.*, Vol. AP-35, pp. 589-596, May.
- Goldhirsh, J. and W. J. Vogel [1989], "Mobile Satellite System Fade Statistics for Shadowing and Multipath from Roadside Trees at UHF and L-band," *IEEE Trans. Antennas Propagat.*, Vol. AP-37, No. 4, pp. 489-498, April.
- Hase, Y., W. J. Vogel, and J. Goldhirsh [1991], "Fade-Durations Derived from Land-Mobile-Satellite Measurements in Australia," *IEEE Trans. Communications*, Vol. 39, No. 5, pp. 664-668, May.
- Hess, G. C. [1980], "Land-Mobile Satellite Excess Path Loss Measurements," *IEEE Trans. on Vehicular Tech.*, Vol. VT-29, No. 2, pp. 290-297, May.
- Hodge, D. B. [1978], "Path Diversity for Earth-Space Communication Links," *Radio Sci.*, Vol. 13, No. 3, pp. 481-487.

- Huck, R. W., J. S. Butterworth, and E. E. Matt [1983], "Propagation Measurements for Land Mobile Satellite Services," *88rd IEEE Vehicular Technology Conference*, Toronto, pp 265-268.
- Jakes, W. C., Jr. (Editor) [1974], *Microwave Mobile Communications*, Wiley, New York.
- Jongejans, A., A. Dissanayake, N. Hart, H. Haugli, C. Loisy, and R. Rogard [1986], "PROSAT-Phase 1 report," *European Space Agency Tech. Rep. ESA STR-216*, May (European Space Agency, 8-10 Rue Mario-Nikis, 75738 Paris Cedex 15, France.)
- LaGrone, A. H. and C. W. Chapman [1961], "Some Propagation Characteristics of High UHF Signals in the Immediate Vicinity of Trees," *IRE Trans. on Antennas and Propagat.*, Vol. AP-9, September, pp. 487-491.
- Lee, W. C. Y. [1986], *Mobile Communications Design Fundamentals*, H. W. Sams and Co., Indianapolis, Indiana.
- Loo, C. [1985], "A Statistical Model for A Land Mobile Satellite Link," *IEEE Trans. on Vehicular Technol.*, Vol. VT-34, No. 3, August, pp. 122-127.
- Loo, C. [1987], "Measurements and Models of A Land Mobile Satellite Channel and Their Applications to MSK Signals," *IEEE Trans. on Vehicular Technol.*, Vol. VT-35, No. 3, August, pp. 114-121.
- Lutz, E., W. Papke, and E. Ploechinger [1986], "Land Mobile Satellite Communications - Channel Model, Modulation and Error Control," *Seventh International Conference on Digital Satellite Communications*, 12 - 16 May, pp. 537-543.
- Papoulis, A. [1965], *Probability, Random Variables, and Stochastic Processes*, McGraw-Hill, New York.
- Reed, H. R., and C. M. Russel [1966], *Ultra High Frequency Propagation*, Boston Technical Publishers, Inc., Cambridge, MA.
- Renduchintala, V.S.M., H. Smith, J.G. Gardiner, and I. Stromberg [1990], "Communications Service Provision to Land Mobiles in Northern Europe by Satellites in High Elevation Orbits - Propagation Aspects," *40th International Conference on Vehicular Technology*, May 6-9, Orlando, Florida (IEEE VTC '90).

- Saruwatari, T., and H. Ryuko [1989], "Propagation Characteristics For Land Mobile Satellite Systems in 1.5 GHz Band," *Proc. of 1989 International Symposium on Antennas and Propagation (ISAP '89)*, Tokyo, Japan, pp 769-772.
- Smith, H., V. S. M. Renduchintala, and J. G. Gardiner [1990], "Assessment of the Channel Offered by A High Elevation Orbit Satellite to Mobiles in Europe - Narrowband Results, Wideband Experiments," *IEE Conference on Radio Receivers and Associated Systems*, Churchill College, Cambridge, UK, July.
- Smith, W. T. and W. L. Stutzman [1986], "Statistical Modeling for Land Mobile Satellite Communications," Virginia Tech Report EE Satcom 86-3 Virginia Tech, Blacksburg, VA, August.
- Ulaby, F. T., M. W. Whitt, and M. C. Dobson [1990], "Measuring the Propagation Properties of A Forest Canopy Using A Polarimetric Scatterometer," *IEEE Trans. Antennas Propagat.*, Vol. AP-38, No. 2, pp. 251-258, Feb.
- Vishakantaiah, P. and W. J. Vogel [1989], LMSS Drive Simulator for Multipath Propagation," *Proc. of NAPEX XIII*, San Jose, CA, 29-30 June, pp 42-47 (Jet Propulsion Laboratory Publication JPL 89-26).
- Vogel, W. J., and J. Goldhirsh [1986], "Tree Attenuation at 869 MHz Derived from Remotely Piloted Aircraft Measurements," *IEEE Trans. Antennas Propagat.*, Vol. AP-34, No. 12, pp. 1460-1464. Dec.
- Vogel, W. J., and U.-S. Hong [1988], "Measurement and Modeling of Land Mobile Satellite Propagation at UHF and L-band," *IEEE Trans. Antennas Propagat.*, Vol. AP-36, No. 5, pp 707-719, May.
- Vogel, W. J., and J. Goldhirsh [1988], "Fade Measurements at L-band and UHF in Mountainous Terrain for Land Mobile Satellite Systems," *IEEE Trans. Antennas Propagat.* Vol. AP-36, No. 1, pp. 104-113, June.
- Vogel, W. J., and J. Goldhirsh [1990], "Mobile Satellite System Propagation Measurements at L-Band Using MARECS-B2" *IEEE Trans. Antennas Propagat.*, Vol. AP-38, no 2, pp 259-264, Feb.
- Vogel, W. J., J. Goldhirsh, and Y. Hase [1991], "Land-Mobile-Satellite Fade Measurements in Australia," *AIAA Journal of Spacecraft and Rockets*, July-August.

- Wakana, H. [1991], "A Propagation Model for Land-Mobile-Satellite Communication," *1991 North American Radio Science Meeting and IEEE/APS Symposium*, The University of Western Ontario, London, Ontario, Canada June 24-28, 1991.
- Weissberger, M. A. [1981], "An Initial Critical Summary of Models for Predicting the Attenuation of Radio Waves by Foliage," ECAC-TR-81-101, *Technical Report of Electromagnetic Compatibility Analysis Center*, Annapolis, Maryland.
- Yoshikawa, M., and M. Kagohara [1989], "Propagation Characteristics in Land Mobile Satellite Systems," *39th IEEE Vehicular Technology Conference*, 1-3 May, pp. 550-556.